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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHEN, CHONGSHAN

ART UNIT PAPER NUMBER

2172

DATE MAILED: 05/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,573

Applicant(s)

CREETH, RICHARD F.

Examiner

Chongshan Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-22 and 24-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Arning et al. ["Arning", Pub. No.: US 2001/0054034 A1].

As per claim 1, Arning discloses an object model for manipulating multidimensional data comprising:

a dataspace comprising at least one dataserver; at least one cube object stored on each of said at least one dataserver, each of said at least one cube object comprising at least one saved view of data; and at least one dimension object stored on each of said at least one dataserver, each of said at least one dimension object comprising at least one saved subset of elements (Arning, Fig. 1, 134, index multi-dimensional database, 136, subject multi-dimensional database, 138, OLAP database system, 146, OLAP server network interface, Fig. 3, Fig. 4).

As per claim 2, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses a plurality of dataservers (Arning, Fig. 1, page 1, [0013]).

As per claim 3, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses at least one dataserver for a database having multidimensional financial data stored thereon (Arning, Fig. 1-6, page 1, [0014]).

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As per claim 4, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses at least one dataserer comprises at least one dataserer for an OLAP database (Arning, Fig. 1, 138, OLAP database system).

As per claim 5, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses each of said at least one dimension object further comprises at least one saved element (Arning, Fig. 1-10).

As per claim 6, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses each of said at least one dimension object further comprises at least one saved hierarchy (Arning, Fig. 1-10).

As per claim 7, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses the at least one saved view of data comprises at least one saved value of data (Arning, Fig. 1-10).

As per claim 8, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses said dataspace comprises an entry point into said object model (Arning, Fig. 1-10).

As per claim 9, Arning teaches all the claimed subject matters as discussed in claim 1, and further discloses dataspace comprises an entry point into said object model (Arning, Fig. 1-10).

As per claim 10, Arning discloses an object model for manipulating multidimensional data comprising:

a dataspace comprising a plurality of dataservers for OLAP databases, said dataspace comprising an entry point into said object model (Arning, Fig. 1, [0013]);

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at least one cube object stored on each of said dataservers, each of said at least one cube object comprising at least one saved view of data, each of the at least one saved view of data comprising at least one saved value of data and at least one subset of data; and at least one dimension object stored on each of said dataservers, each of said at least one dimension object comprising at least one saved subset of elements, at least one element and at least one hierarchy (Arning, Fig. 1-10).

As per claim 11, Arning discloses a system for displaying data from a multidimensional database to a user, said system comprising:

a system computer; a multidimensional database accessible by said computer, said multidimensional database having objects stored thereon (Arning, Fig. 1); and

object model software executing on said system computer for instantiating and inflating specified objects up-front a first time said database is accessed, and for instantiating and inflating objects which are not specified objects on demand as the nonspecified objects are accessed (Arning, Fig. 1-17, page 2, [0041]).

As per claim 12, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses software executing on said computer for receiving from the user an indication of specified objects (Arning, Fig. 1-17).

As per claim 13, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses software executing on said computer for receiving from the user state information (Arning, Fig. 1-17).

As per claim 14, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses the specified objects comprise collections of objects (Arning, Fig. 1-7).

As per claim 15, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses the specified objects comprise specific properties of objects (Arning, Fig. 1-17).

As per claim 16, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses multi-dimensional database comprises a database having multidimensional financial data stored thereon (Arning, Fig. 1-3).

As per claim 17, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses multidimensional database comprises an OLAP database (Arning, Fig. 1).

As per claim 18, Arning teaches all the claimed subject matters as discussed in claim 11, and further discloses a dataspace comprising at least one dataserver; at least one cube object stored on each of said at least one dataserver, each of said at least one cube object comprising at least one saved view of data; and at least one dimension object stored on each of said at least one dataserver, each of said at least one dimension object comprising at least one saved subset of elements (Arning, Fig. 1-4).

As per claim 19, Arning teaches all the claimed subject matters as discussed in claim 18, and further discloses the specified objects are identified via said dataspace (Arning, Fig. 1-4).

As per claim 20, Arning teaches all the claimed subject matters as discussed in claim 19, and further discloses software executing on said computer for receiving from the user an indication of specified objects (Arning, Fig. 1-17).

As per claim 21, Arning teaches all the claimed subject matters as discussed in claim 20, and further discloses the indication of specified objects comprises a structured string variable (Arning, Fig. 1-17).

As per claim 22, Arning teaches all the claimed subject matters as discussed in claim 21, and further discloses the structured string variable comprises raw text separated by delimiters (Arning, Fig. 1-17).

As per claim 24, Arning discloses a system for displaying data from a multidimensional OLAP database to a user, said system comprising:

a system computer; a multidimensional database accessible by said computer, said multidimensional database having objects stored thereon (Arning, Fig. 1);

object model software executing on said system computer for instantiating and inflating specified objects up-front a first time said database is accessed, and for instantiating and inflating objects which are not specified objects on demand as the nonspecified objects are accessed; and software executing on said computer for receiving from the user an indication of specified objects and state information (Arning, Fig. 1-17, page 2, [0041]).

As per claim 25, Arning teaches all the claimed subject matters as discussed in claim 24, and further discloses the specified objects comprise collections of objects (Arning, Fig. 1-7).

As per claim 26, Arning teaches all the claimed subject matters as discussed in claim 24, and further discloses the specified objects comprise specific properties of objects (Arning, Fig. 1-17).

As per claim 27, Arning discloses a system for displaying data from a multidimensional database to a user, said system comprising:

a system computer; a multidimensional database accessible by said computer, said multidimensional database having objects stored thereon (Arning, Fig. 1); and

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object model software executing on said system computer for instantiating and inflating specified objects up-front a first time said database is accessed, and for instantiating and inflating objects which are not specified objects on demand as the nonspecified objects are accessed, said object model software employs an object model comprising: a dataspace comprising at least one dataserver; at least one cube object stored on each of said at least one dataserver, each of said at least one cube object comprising at least one saved view of data; and at least one dimension object stored on each of said at least one dataserver, each of said at least one dimension object comprising at least one saved subset of elements (Arning, Fig. 1-17).

As per claim 28, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses a database having multidimensional financial data stored thereon (Arning, Fig. 1-7).

As per claim 29, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses multidimensional database comprises an OLAP database (Arning, Fig. 1).

As per claim 30, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses a plurality of dataservers (Arning, Fig. 1, page 1, [0013]).

As per claim 31, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses at least one dimension object further comprises at least one saved element (Arning, Fig. 1-17).

As per claim 32, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses at least one dimension object further comprises at least one saved hierarchy (Arning, Fig. 6).

As per claim 33, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses at least one saved view of data comprises at least one saved value of data (Arning, Fig. 1-17).

As per claim 34, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses the at least one saved view of data comprises at least one saved subset of data (Arning, Fig. 1-17).

As per claim 35, Arning teaches all the claimed subject matters as discussed in claim 27, and further discloses an entry point into said object model (Arning, Fig. 1, page 1, [0018]).

Claims 36-38 are rejected on grounds corresponding to the reasons given above for claims 13-15.

Claims 39-42 are rejected on grounds corresponding to the reasons given above for claims 19-22.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 23 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arning et al. ["Arning", Pub. No.: US 2001/0054034 A1].

As per claim 23, Arning teaches all the claimed subject matters as discussed in claim 21, except for explicitly disclosing the structured string variable comprises strings in an extensible

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markup language (XML) format. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the structured string variable in an extensible markup language (XML) format in order to store web pages.

Claim 43 is rejected on grounds corresponding to the reasons given above for claim 23.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bakalash et al. (6,408,292) disclose method of and system for managing multi-dimensional databases using modular-arithmetic based address data mapping processes on integer-encoded business dimensions.

Egilsson et al. (6,418,427) disclose online modifications of dimension structures in multidimensional processing.

Inquiry

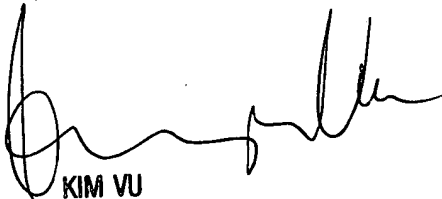
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (703) 305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703)305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

CC
May 5, 2003



KIM VU
SUPERVISORY PATENT EXAMINER
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